WHAT IS CLAIMED IS:

1. A printing system including a host device which creates print data in a page unit and a printing device which prints out the print data transmitted from the host device,

said printing device further including memory means for storing pages of the print data at least partially,

wherein, when the print data are to exceed a memory capacity of the memory means, the print data are printed out by combining first print data, which correspond to print data within the memory capacity of the memory means, and second print data, which correspond to print data exceeding the memory capacity of the memory means and which are transmitted from the host device.

2. The printing system as set forth in claim 1, wherein said printing device further includes re-transmission requesting means which requests the host device to re-transmit the second print data to the printing device when the print data are to be printed out in multiple copies, and

printing of the print data of second and subsequent copies is carried out by combining the first print data, and the second print data which are re-transmitted from the host device in response to the request of the re-

transmission requesting means.

3. The printing system as set forth in claim 2, wherein said memory means stores identification information for identifying the second print data, and

the re-transmission requesting means decides, based on the identification information, the second print data for which re-transmission should be requested to the host device.

4. The printing system as set forth in claim 2, wherein the memory means stores a leading side of the print data as the first print data.

5. The printing system as set forth in claim 2, wherein the memory means stores a tailing side of the print data as the first print data.

6. The printing device as set forth in claim 5, wherein the memory means stores transmitted data from the host device from a leading side, and when stored data reaches the memory capacity, the memory means overwrites the stored data from the leading side so as to store the transmitted data.

7. The printing system as set forth in claim 6, wherein the memory means stores, as identification information, page numbers of the stored data whose content has been erased by overwrite by the transmitted data, and

the re-transmission requesting means decides, based on the identification information, the second print data for which re-transmission should be requested to the host device.

8. The printing system as set forth in claim 1, wherein, when the print data are to exceed the memory capacity of the memory means, the memory means divides a storage area of the memory means into two storage areas based on the memory capacity, in which the print data stored in one of the storage areas from a leading side are maintained, and the print data stored in the other storage area are overwritten so as to store the print data from a tailing side, and

the printing device further includes first combining means for extracting the print data in order of ascending page number from the one of the storage areas and for extracting the print data in order of descending page number from the other storage area, said first combining means combining the extracted print data from the two

storage areas with each other, and the printing device printing out the print data which were combined by the first combining means on a single recording medium.

9. The printing system as set forth in claim 8, wherein memory capacities of the two storage areas are substantially equal.

10. The printing system as set forth in claim 8, wherein the printing device further includes re-transmission requesting means for requesting the host device to re-transmit, as the second print data, the print data of pages which were erased by overwrite in the other storage area, and

the memory means stores the re-transmitted print data by overwrite on a storage area of the print data which have been printed already.

11. The printing system as set forth in claim 1, wherein, when the print data are to exceed the memory capacity of the memory means, the memory means divides a storage area of the memory means into two storage areas based on number of pages of the print data, in which the print data stored in one of the storage areas from a leading side are maintained, and the print data stored in

the other storage area are overwritten by the print data from a tailing side, and

the printing device further includes second combining means for extracting the print data in order of ascending page number from the one of the storage areas and for extracting the print data in order of descending page number from the other storage area, said second combining means combining the extracted print data from the two storage areas with each other, and the printing device printing out the print data which were combined by the second combining means on a single recording medium.

12. The printing system as set forth in claim 11, wherein the print data respectively stored in the two storage areas have substantially equal page numbers.

13. The printing system as set forth in claim 11, wherein the printing device further includes re-transmission requesting means for requesting the host device to re-transmit, as the second print data, the print data of pages which were erased by overwrite in the other storage area, and

the memory means stores the re-transmitted print data by overwrite on a storage area of the print data which have been printed already.

14. The printing system as set forth in claim 1, wherein the printing device includes:

transmission requesting means for requesting the host device to transmit the second print data in order of descending page number from a tailing side; and

third combining means for extracting the first print data from the memory means in order of ascending page number and for combining the extracted first print data with the second print data which were transmitted from the host device in response to the request of the transmission requesting means, and

the printing device prints out print data which were combined by the third combining means on a single recording medium.

15. The printing system as set forth in claim 14, wherein the printing device further includes re-transmission requesting means for requesting the host device to re-transmit the second print data when the print data are to be printed out in multiple copies, and

the third combining means extracts the first print data in order of ascending page number from the memory means, and combines the extracted first print data with the second print data which were re-transmitted from a tailing side in response to the request of the re-

transmission requesting means.

16. The printing system as set forth in claim 1, wherein the memory means stores the first print data both in order of ascending page number from a leading side and in order of descending page number from a tailing side, and

the printing device further includes fourth combining means for extracting the first print data from the memory means in order of ascending page number and for extracting the first print data in order of descending page number, said fourth combining means combining the extracted first print data with each other, and the printing device printing out the print data which were combined by the fourth combining means on a single recording medium.

17. The printing system as set forth in claim 16, wherein, after printing the print data, the fourth combining means extracts from the memory means the first print data which should be printed next, and combines with each other the first print data extracted, and

the memory means stores by overwrite the data combined by the fourth combining means on a storage area storing the data which have been printed already, and

the printing device prints out the data stored by overwrite on the memory means on the recording medium.

18. A printing system including:

memory means for storing in a page unit print data transmitted from a host device;

output section for printing the print data stored in the memory means; and

control means for controlling the memory means and the output section,

wherein the control means, upon detecting presence of print data of pages which exceed a memory capacity of the memory means, instructs the memory means to store identification information which is to be used to identify the print data of exceeding pages, and requests, based on the identification information, the host device to transmit the print data of exceeding pages corresponding to the identification information, and the control means combines in a page unit the print data stored in the memory means and the print data of exceeding pages which were re-transmitted from the host device so as to print out the data from the output section.

19. A printing method in a printing system,

comprising the steps of:

(1) storing pages of print data at least partially on memory means, which print data having been transmitted in a page unit from a host device; and

(2) printing the print data, when the print data are to exceed a memory capacity of the memory means, by combining first print data which correspond to print data within the a memory capacity of the memory means and second print data which are transmitted from the host device and which correspond to print data exceeding the memory capacity of the memory means.

20. The printing method in a printing system as set forth in claim 19, wherein said step (2) further includes the steps of:

2(a) requesting the host device to re-transmit the second print data when the print data are to be printed out in multiple copies; and

2(b) printing the print data of second and subsequent copies by combining the first print data, and the second print data which are re-transmitted from the host device.

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21. The printing method in a printing system as set forth in claim 20, wherein said step 2(a) further

includes the steps of:

storing identification information for identifying the second print data in the memory means; and

deciding, based on the identification information, the second print data for which re-transmission should be requested to the host device.

22. The printing method in a printing system as set forth in claim 20, wherein said step (1) includes the step of storing a leading side of the print data as the first print data in the memory means.

23. The printing method in a printing system as set forth in claim 20, wherein said step (1) includes the step of storing a tailing side of the print data as the first print data in the memory means.

24. The printing method in a printing system as set forth in claim 23, wherein said step (1) includes the step of storing the transmitted data from the host device from a leading side, and when the stored data reach the memory capacity, overwriting the stored data from a leading side so as to store the transmitted data.

25. The printing method in a printing system as set

forth in claim 24, wherein said step (1) includes the step of storing, as identification information, page numbers of the stored data whose content has been erased by overwrite by the transmitted data, and

said step (2) includes the step of deciding, based on the identification information, the second print data for which re-transmission should be requested to the host device.

26. The printing method in a printing system as set forth in claim 19, wherein said step (1) includes the step of dividing, when the print data are to exceed the memory capacity of the memory means, a storage area of the memory means into two storage areas based on the memory capacity, in which the print data stored in one of the storage areas from a leading side are maintained, and the print data stored in the other storage area are overwritten so as to store the print data from a tailing side, and

said step (2) includes the steps of:

extracting the print data in order of ascending page number from the one of the storage areas and extracting the print data in order of descending page number from the other storage area so as to combine with each other the extracted print data from the two storage areas, and

printing out the combined print data on a single recording medium.

27. The printing method in a printing system as set forth in claim 26, wherein said step (2) further includes the steps of:

requesting the host device to re-transmit, as the second print data, the print data of pages which were erased by overwrite in the other storage area, and

storing the re-transmitted print data by overwrite on a storage area of the print data which have been printed already.

28. The printing method in a printing system as set forth in claim 19, wherein said step (1) includes the step of dividing, when the print data are to exceed the memory capacity of the memory means, a storage area of the memory means into two storage areas, in which the print data stored in one of the storage areas from a leading page are maintained, and the print data stored in the other storage area are overwritten by the print data from a tailing page, and

said step (2) further includes the steps of:

extracting the print data in order of ascending page number from the one of the storage areas and for

extracting the print data in order of descending page number from the other storage area so as to combine the extracted print data from the two storage areas with each other, and

printing out the combined print data on a single recording medium.

29. The printing method in a printing system as set forth in claim 28, wherein said step (2) further includes the steps of:

requesting the host device to re-transmit, as the second print data, the print data of pages which were erased by overwrite in the other storage area, and

storing the re-transmitted print data by overwrite on a storage area storing the print data which have been printed already.

30. The printing method in a printing system as set forth in claim 19, wherein said step (2) further includes the steps of:

requesting the host device to transmit the second print data in order of descending page number from a tailing side;

extracting the first print data from the memory means in order of ascending page number so as to combine

the extracted first print data with the second print data which were transmitted from the host device in response to the request of the transmission requesting means, and

printing out the combined print data on a single recording medium.

31. The printing method in a printing system as set forth in claim 30, wherein said step (2) further includes the steps of:

requesting the host device to re-transmit the second print data when the print data are to be printed out in multiple copies; and

extracting the first print data in order of ascending page number from the memory means so as to combine the extracted first print data with the second print data which were re-transmitted from a tailing side in response to the request of the re-transmission requesting means.

32. The printing method in a printing system as set forth in claim 19, wherein said step (1) includes the step of storing the first print data both in order of ascending page number from a leading side and in order of descending page number from a tailing side, and

said step (2) further includes the steps of:

extracting the first print data from the memory means in order of ascending page number and for extracting the first print data in order of descending page number so as to combine the extracted first print data with each other; and

printing out the combined print data on a single recording medium.

33. The printing method in a printing system as set forth in claim 32, wherein said step (2) further includes the steps of:

extracting, after printing the print data, the first print data which should be printed next from the memory means so as to combine the first print data extracted with each other; and

storing by overwrite the combined data on a storage area storing the data which have been printed already; and

printing out the data which were stored by overwrite in the memory means on the recording medium.

34. A printing method in a printing system, comprising the steps of:

(a) storing in a page unit print data transmitted from a host device;

(b) detecting presence of print data of pages exceeding a memory capacity of the memory means in said step (a);

(c) storing identification information for identifying the print data of exceeding pages;

(d) requesting, based on the identification information, the host device to re-transmit the print data of exceeding pages; and

(e) printing the print data by combining in a page unit the print data stored in said step (a) and the print data of exceeding pages which were re-transmitted from the host device in accordance with said step (d).

35. A printing method in a printing system, comprising a first overall printing step and a second overall printing step,

said first overall printing step including the steps of:

(a) receiving print data from a host device in a page unit;

(b) detecting receipt of print data in a page unit which exceed a memory capacity of memory means so as to store page information of the exceeding pages in the memory means;

(c) storing the received print data subsequently in

the memory means in a page unit, and storing the print data of exceeding pages in the memory means by overwrite in descending order from a site where print data of a tailing page is stored toward a site where print data of a leading page is stored; and

(d) printing the print data stored in a page unit, and

said second overall printing step including the steps of:

(e) requesting, based on the page information of exceeding pages, the host device to re-transmit the print data of pages preceding the exceeding pages, and receiving the print data of the pages preceding the exceeding pages in a page unit;

(f) printing the pages preceding the exceeding pages based on the print data which were received in a page unit from the host device in said step (e), and printing the exceeding pages based on the print data which were stored in a page unit in said step (c).

36. A printing method in a printing system, comprising the steps of:

(a) storing print data by way of storing print data which were transmitted from a host device in memory means in a page unit, in which when presence of print data of

pages which exceed a memory capacity of the memory means is detected, information of the exceeding pages is stored in the memory means, and the print data of pages preceding the exceeding pages are subsequently stored from a leading side in an area of the memory means which makes up half of a storage area of the memory means, and the print data of an area corresponding to the other half of the memory means are overwritten so as to store the transmitted print data from a tailing side in a page unit;

(b) combining appropriate pages of the print data information stored in a page unit in said step (a), and, with regard to the exceeding pages which are not stored in the memory means, requesting the host device to re-transmit the print data based on the information of exceeding pages so as to combine appropriate pages after re-transmission of the print data; and

(c) printing the combined print data on a single recording medium based on the print data combined in said step (b).

37. The printing method in a printing system as set forth in claim 36, further comprising the step of overwriting the print data of the storage area which have been printed already in said step (c) so as to store the

print data re-transmitted from the host device.

38. The printing method in a printing system as set forth in claim 36, wherein a boundary of the storage area of the memory means is variable in accordance with information volume of the print data transmitted from the host device.

39. A printing method in a printing system, comprising the steps of:

(a) storing print data transmitted from the host device in a page unit, the print data being stored subsequently from a leading page until presence of print data of pages exceeding a memory capacity of the memory means is detected;

(b) combining multiple sets of appropriate pages of print information which is stored in the memory means in a page unit, and with regard to the exceeding pages which are not stored in the memory means, requesting the host device to re-transmit the print data in descending order subsequently from the print data which corresponds to a tailing page so as to combine appropriate pages after re-transmission of the print data; and

(c) printing the combined print data on a single recording medium based on the print data which were

combined in said step (b).